

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**South Central Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Norcraft Companies, LLC.  
1 Millrace Drive - Lynchburg, Virginia  
Permit No. SCRO30845

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Norcraft Companies, LLC has applied for a Title V Operating Permit for its 1 Millrace Drive - Lynchburg, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:\_\_\_\_\_ Date:\_\_\_\_\_

Air Permit Manager:\_\_\_\_\_ Date:\_\_\_\_\_

Regional Director:\_\_\_\_\_ Date:\_\_\_\_\_

## **FACILITY INFORMATION**

### Permittee

Norcraft Companies, LLC.  
1 Millrace Drive  
Lynchburg, VA 24502

### Facility

Norcraft Companies, LLC.  
1 Millrace Drive  
Lynchburg, VA 24502

AFS ID No. 51-680-00153

## **SOURCE DESCRIPTION**

SIC Code: 2434 - This is a kitchen and bath cabinet manufacturing facility. Cabinet components are received by the source from suppliers. Minimal woodworking, consisting of routing, cutting, and sanding, is required prior to the finishing process.

The facility is a Title V major source of Volatile Organic Compounds and HAPs. This source is located in an attainment area for all pollutants and is a PSD minor source. The facility was previously permitted (as StarMark of Virginia) under a Minor NSR Permit issued on July 20, 1988, and amended on January 24, 1995, March 1, 1996, August 7, 1998, January 22, 1999, December 15, 1999, November 21, 2000, and September 24, 2002. A Title V permit was issued to the facility on May 24, 1999. On March 26, 2002, the facility submitted a name change from StarMark Co. to Norcraft Companies LLC. The facility name was changed to Norcraft Companies LLC in the September 24, 2002 Minor NSR permit amendment.

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, was conducted on August 6, 2003. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at this facility consist of the following:

See Condition II.A.

## EMISSIONS INVENTORY

A copy of the 2002 annual emission update is attached. Emissions are summarized in the following tables.

2002 Actual Emissions

	2002 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>
F1	28.9			0.8	
Total	28.9			0.8	

2002 Facility Hazardous Air Pollutant Emissions

Pollutant	2002 Hazardous Air Pollutant Emission in Tons/Yr
Methanol	0.6
Methyl Ethyl Ketone	0.6
Toluene	2.8
Xylenes	3.8

## EMISSION UNIT APPLICABLE REQUIREMENTS - Woodworking

### Limitations

Conditions III. A.1. through 4. contain the control requirements and the visible emissions limitations for the dust collection, transfer and wood waste handling systems. These conditions are taken from the NSR permit issued September 24, 2002.

Condition III. A. 5. contains the emissions limitations for the wood dust collection systems (BH1 and BH2). This condition is taken from the NSR permit issued September 24, 2002.

Condition III. A. 6. establishes a threshold at which the source is required to develop a Quality Improvement Plan (QIP). For fabric filters (BH1 and BH2), the permittee shall develop a QIP according to 40 CFR 64.8, if more than five (5) excursions from the indicator range specified in the Compliance Assurance Monitoring (CAM) Plan (Attachment A) occur within a semi-annual period.

### **Monitoring**

Condition III.B.1. requires that the fabric filters be equipped with devices to continuously measure the differential pressure drop across the fabric filter. This condition is taken from the NSR permit issued September 24, 2002

Condition III.B.2. The fabric filters (BH1 and BH2) are subject to Compliance Assurance Monitoring (CAM) since the potential particulate emissions before controls are greater than 100 tons/yr. Norcraft submitted a CAM Plan (Attachment A) to satisfy the requirements of 40 CFR 64. Based on Norcraft's proposal, visible emissions has been chosen as the indicator for compliance. Normal process operations will not produce conditions that adversely affect the fabric filters, so no process operational parameter will be monitored. Visible emissions from the fabric filters exhaust will be monitored daily using EPA Reference Method 22-like procedures. A 1-minute observation will be performed on each fabric filter exhaust and the results recorded in a logbook by the observer. An excursion is defined as the presence of visible emissions. Five excursions during a 6-month reporting period will require the development of a Quality Improvement Plan (QIP) per 40 CFR 64.8.

### **Recordkeeping**

Condition III.C. requires the source to keep visual emission observation logs as required by Condition III.B.2, excursion records, corrective action if needed, and if required a written QIP.

### **Reporting**

Condition III.D. lists the reporting requirements for CAM. Also there are reporting requirements in the General Conditions and that is stated below.

### **Streamlined Requirements**

There are no streamlined requirements.

### **EMISSION UNIT APPLICABLE REQUIREMENTS – Furniture Finishing**

## **Limitations**

Conditions IV. A.1. through 3. contain the control requirements and the visible emissions limitations for the spray booths. These conditions are taken from the NSR permit issued September 24, 2002.

Condition IV. A. 4. contains the emissions limitations for the wood finishing operation (F1). This condition is taken from the NSR permit issued September 24, 2002.

## **Monitoring**

Condition IV.B.1. requires that each spray booth be equipped with a device to continuously measure the differential pressure drop across the filter. This condition is taken from the NSR permit issued September 24, 2002

Condition IV.B.2. contains the opacity periodic monitoring. Monitoring of visible emissions will be required of the source to make an observation of the spray booth stacks at least one time per week, when the spray booths are operating. They are to observe for the presence of visible emissions from each stack. If visible emissions are observed, the permittee will take timely corrective action to resume operations without visible emissions to assure visible emissions compliance. The permittee will keep a log of observations and any corrective actions. If the spray booth has not operated during the week, this fact shall be noted in the log, and that the visible emission observation was not required. Also, if visible emissions have been conducted for 12 consecutive weeks and no visible emissions are seen, the permittee may reduce the monitoring frequency to once per month for that stack.

## **MACT Requirements**

Condition IV.D. contains the MACT requirements. Because this source has the potential to emit greater than 10 tons/yr of any single HAP and/or 25 tons/yr of any combination of HAPs it is subject to the MACT for furniture finishing (Subpart JJ). Conditions regarding the MACT were included in the NSR permit issued on August 7, 1998 and the Title V permit issued May 24, 1999. An NSR permit was issued on September 24, 2002 that superseded previous NSR permits. This Title V incorporates the MACT conditions from the NSR permit including the wording from the most recent version of Subpart JJ. The source is using compliant coatings to meet the emissions standards required by the MACT, however, the averaging method of compliance is still available to the source should it be needed. As the source does not intend to use a control device to meet the emission standards, those portions of the MACT requirements dealing with control devices have not been included in this Title V.

## **Recordkeeping**

Condition IV.C. contains the recordkeeping requirements from Condition 15 of the NSR permit issued on September 24, 2002.

Condition IV.D.8 contains the MACT recordkeeping requirements from Condition 25 of the NSR permit issued on September 24, 2002.

## **Testing**

Condition IV.D.4. states that if compliance testing is conducted the tests shall be conducted as specified in 40 CFR 63.805 of Subpart JJ. This condition is taken from the NSR permit issued September 24, 2002.

## **Reporting**

Condition IV.D.10 contains the MACT Subpart JJ reporting requirements.

## **Streamlined Requirements**

Condition IV.D.7.a. The Work Practice Standards were developed on schedule. Therefore, the sentence requiring developing the standards has been streamlined out of the permit.

Condition IV.D.7.b. All existing personnel were trained within six months of the compliance date, December 7, 1998. This requirement has been streamline out.

## **FACILITY WIDE CONDITIONS**

### **Testing**

Condition V.B. states that the permitted facility shall be constructed so as to allow emissions testing at any time, using appropriated methods. The permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

## **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

## **Comments on General Conditions**

### **B. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement NO. 3-2001”.

### **F. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

### **U. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

## **STATE ONLY APPLICABLE REQUIREMENTS**

There are no state only requirements.

## **FUTURE APPLICABLE REQUIREMENTS**

There are no known future applicable requirements.

## **INAPPLICABLE REQUIREMENTS**

There are no inapplicable requirements to be listed.

## **COMPLIANCE PLAN**

A compliance plan is not required. The source is in compliance with the requirements of its permits.

## INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation <sup>1</sup> (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity ( 5-80-720 C.)
D1	One (1) natural gas-fired drying oven	5-80-720 C.2.a.	PM, VOC, NO <sub>x</sub> , CO	1 MMBTU/HR

<sup>1</sup>The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

## CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## PUBLIC PARTICIPATION

The proposed permit will be place on public notice in The News & Advance from February 13, 2004 to March 13, 2004.

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**South Central Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Addendum to the May 24, 2004 Statement of Legal and Factual Basis

Norcraft Companies, LLC.  
1 Millrace Drive - Lynchburg, Virginia  
Permit No. SCRO30845

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Norcraft Companies, LLC has applied for a Title V Operating Permit for its 1 Millrace Drive - Lynchburg, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:\_\_\_\_\_ Date:  
434-582-5120

Air Permit Manager:\_\_\_\_\_ Date:  
*David J. Brown*

Regional Director:\_\_\_\_\_ Date:  
*T. L. Henderson*

## **FACILITY INFORMATION**

### Permittee

Norcraft Companies, LLC.  
3020 Denmark Avenue  
Eagen, MN, 55121-2271

### Facility

Norcraft Companies, LLC.  
1 Millrace Drive  
Lynchburg, VA 24502

AFS ID No. 51-680-00153

## **PERMIT AMENDMENT INFORMATION**

This amendment is being generated to incorporate the major New Source Permit to Construct and Operate Amendment issued on May 24, 2004. The May 28, 2004 permit allowed the construction of 8 more spray booths (B5, B6, B7, B8, B9, B10, B11, and B12) on finishing line F1. The Engineering Analysis for the May 28, 2004 permit is attached as a reference (30845a04\_maa.doc).

## **COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site visit, was conducted on August 6, 2003. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## **EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units added to this facility consist of the following:

- 2 toner spray booths (Unit IDs: B5, B6) rated at 0.42 gal/hr each
- 2 stain spray booths (Unit IDs: B7, B8) rated at 0.72 gal/hr each
- 2 sealer spray booths (Unit IDs: B9, B10) rated at 0.95 gal/hr each
- 1 topcoat spray booth (Unit IDs: B11) rated at 0.95 gal/hr
- 1 glaze spray booth (Unit ID: B12) rated at 0.10 gal/hr

These are included in Condition II.A.

## **EMISSION UNIT APPLICABLE REQUIREMENTS – Furniture Finishing**

### **Limitations**

Condition IV. A. 4. contains the emissions limitations for the wood finishing operation (F1). This condition is taken from the NSR permit issued May 28, 2004.

### **Monitoring**

There were no Changes to monitoring

### **MACT Requirements**

Condition IV.D. contains the MACT requirements.

Condition IV.D.7.a. was changed (separated into section (1), (2), and (3) to reflect the MACT changes that were incorporated from the NSR permit.

### **Recordkeeping**

There were no changes to the recordkeeping.

### **Testing**

There were no changes to testing requirements.

### **Reporting**

There were no changes to reporting requirements

## **FACILITY WIDE CONDITIONS**

There were no changes to the facility wide conditions.

## **GENERAL CONDITIONS**

There were no changes to the general conditions.

## **STATE ONLY APPLICABLE REQUIREMENTS**

There are no state only requirements.

#### **FUTURE APPLICABLE REQUIREMENTS**

There are no known future applicable requirements.

#### **INAPPLICABLE REQUIREMENTS**

There are no inapplicable requirements to be listed.

#### **COMPLIANCE PLAN**

A compliance plan is not required. The source is in compliance with the requirements of its permits.

#### **CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

#### **PUBLIC PARTICIPATION**

The proposed permit will be placed on public notice in The News & Advance from April 19, 2005 to May 20, 2005.